Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.







led States
Department of
Agriculture

Soil Conservation Service

Casper, Wyoming



Wyoming Water Supply Outlook

February 1, 1986



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATI	F	AD	DRESS

Alaska 201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687

Arizona 201 East Indianola, Suite 200, Phoenix, AZ 85012

Colorado 2490 West 26th Ave., Denver, CO 80211

(New Mexico)

Idaho 304 North 8th Street, Room 345, Boise, ID 83702

Montana 10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715

Nevada 50 South Virginia Street, Third Floor, Reno, NV 89505

Oregon 1220 Southwest 3rd Ave., 16th Floor, Portland, OR 97204

Utah 4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147

Washington 360 U.S. Court House, Spokane, WA 99201

Wyoming Federal Building, 100 East "B" Street, Casper, WY 82602

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 98502; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Saskatchewan, and N.W.T. — The Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta, T3C 1A6.

Wyoming Water Supply Outlook and

Federal-State-Private
Cooperative Snow Surveys

Issued by

Wilson Scaling Chief Soil Conservation Service Washington, D.C.

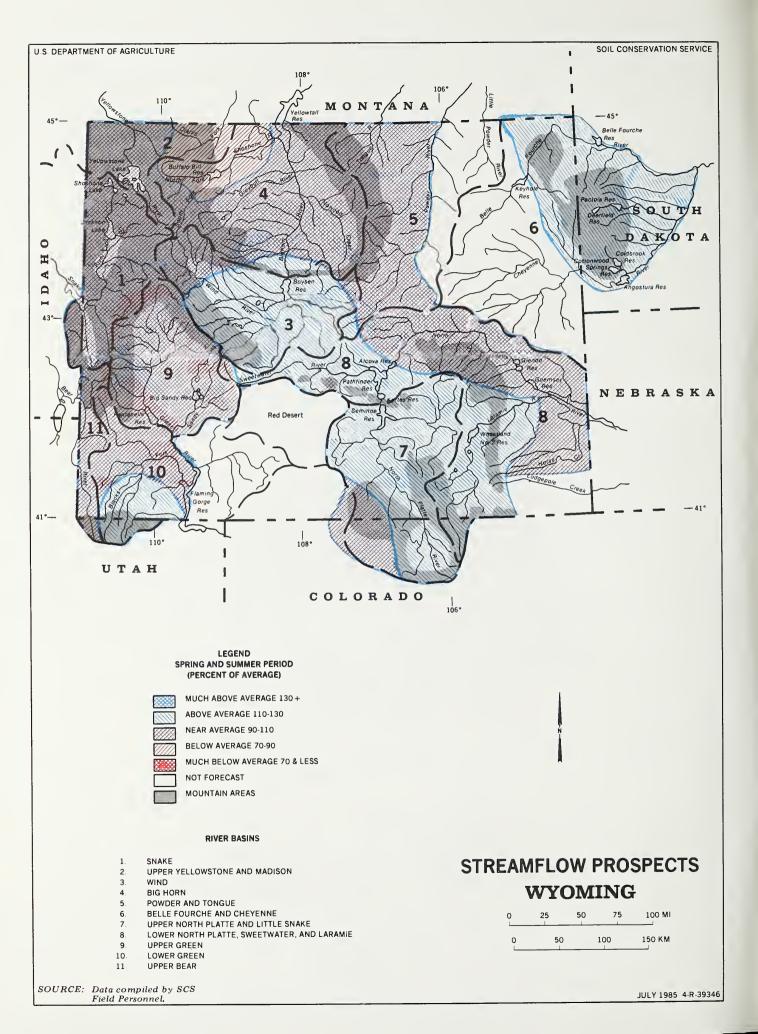
Released by

Frank S. Dickson State Conservationist Soil Conservation Service Casper, Wyoming

Prepared by

Ted Gilbert Acting Water Supply Specialist Soil Conservation Service Room 3124, 100 East B Street Casper, Wyoming 82601

Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin.



GENERAL OUTLOOK

SUMMARY:

Despite a dry January, stream flow forecasts remain encouraging. Most of the state can expect near normal, or slightly above normal runoff this spring and summer. Snowpack buildup as compaired to normal took a nosedive during the month. However, due to early season buildup much of the state remains near or slightly above normal. The exception is the Black Hills where snowpack accumulation is 74% above normal.

SNOWPACK:

Snowpack accumulation as compared to normal took a nosedive during the month of January. Hardest hit was the Green River Basin where the snowpack comparison dropped from much above average to nearly normal. The only parts of the state that remain much above average as far as snowpack accumulation is concerned is the Popo Agie drainage, the upper Laramie River and Brush Creek in the Platte River drainage and the Black Hills in northeast Wyoming. These areas ranged from 74% above average in the Black Hills to 30% above average in the Laramie River drainage. Much of the Platte River drainage and lower Wind River drainage remained above average (10 to 30 percent). The rest of the state shows snowpack accumulation to be near normal.

PRECIPITATION:

January 1986 was a very dry month over most of the state. Many areas in the Upper North Platte River, Wind River, Green River, and Bear River drainages received about one-tenth of an inch or less for the entire month...which is more than 90% below normal. However, mountainous terrain in the west received two and one-half to three inches of water equivalent, which was about normal. Most other areas received less than one inch of water equivalent which was about one-fourth to three-fourths of monthly normal. Seasonal comparisions were about one-fourth to one-half above normal along most eastern areas...elsewhere about normal due to October through December 1985 precipitation.

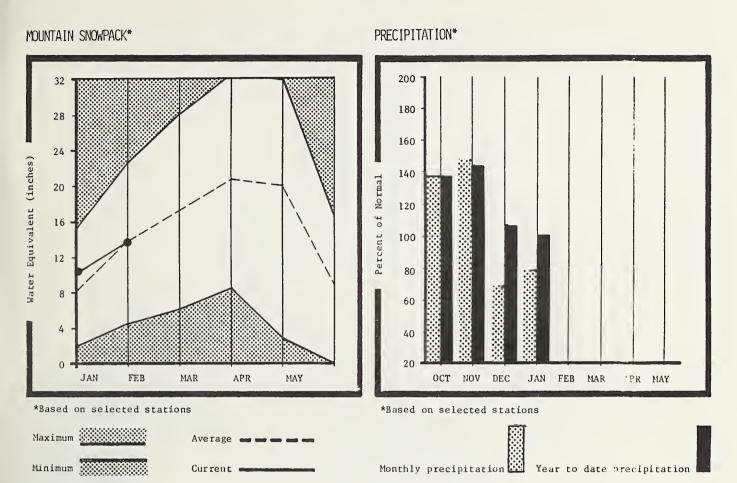
RESERVOIRS:

Stored water in the major reservoirs in the state continues to be generally less than at this time last year. This storage is about 30 percent less than last year. However, when compared to long term averages, storage is about 20 percent above average.

STREAMFLOH:

Streamflow forecasts for the summer months remain encouraging despite a dry month of January. The Black Hills, Upper Platte, Laramie River, Lower Wind River, Blacks Fork and Henrys Fork drainages continue to be forecast at 10 to 30 percent above average. The remainder of the state can expect near normal stream flows with the exception of the Shoshone and Lower Clarks Fork drainages. These two drainages remain as forecast in January at about 10% below normal. These forecasts are dependent upon average snowfall accumulations for the remaining portion of the snow season. The forecasts in this bulletin are a result of coordinated activity between the Soil Conservation Service and the National Weather Service in an effort to provide the best possible service to the water user.

SNAKE RIVER BASIN



WATER SUPPLY OUTLOOK:

Near normal streamflows can be expected for the drainages in this basin. Snowpack accumulation is also near normal. The Gros Ventre drainage is about 27% above normal. Snow depths are 16% more than at this time last year. Precipitation during the month was only 79% of normal. Year to date precipitation in near normal. Current reservoir capacity in the basin is only at 58%, and is 30% below normal.

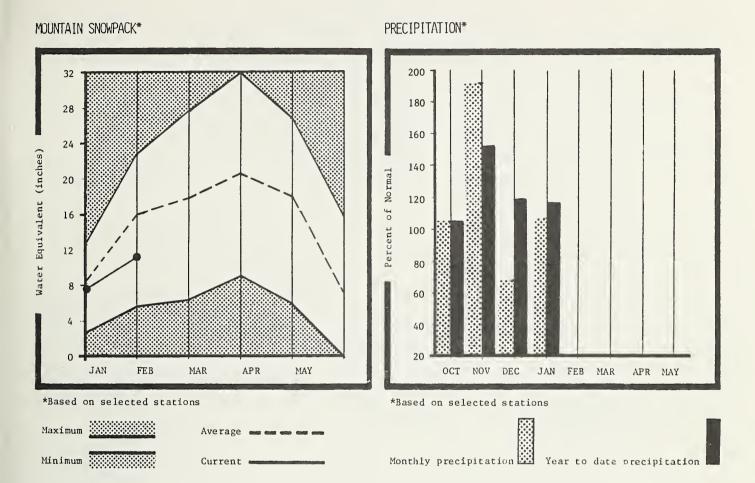
SNAKE RIVER BASIN

TONEDACY POINT	FORECAST	20 YR. AVE.	MOST PROBABLE	MOST PROBABLE	REAS.	REAS. MIN.	PEAK FLOW	PEAK	LOH FLOH	LON
	PERIOD	(1000AF)	(1000AF)	(% AVE.)	(% AVE.)	(% AVE.)	(CFS)	DATE	(CFS)	DATE
4AKE R IVE R mear Moran *	APR-SEP	880.0			z i K					
HAUT VIATE HEST LIGHT *	HLK-2EL	000.0			114					
MAME RIVER above Palisades *	AFR-SEP	2730.0	2580.0	₹4	112	77				
NAKE FIV E R at Heise· ID *	APR-SEP	4066.0	3900.0	95	124	68				
ACIFIC CREEK at Moran	APR-SEP	174.0	170.0	97		74				
REYS RIVER above Palisades	APR-SEP	393.0	385.0	97	122	74				
ALT RIVER near Etna	AFR-SEP	394.0	365.0	72	135	59				
ALISADES RESERVOIR Inflow *	APR-SEP	3793.0	3625.0	95	117	75				
WIFT CREEK mear Afton	MAY-SEP	46.0	42.5	72	117	67				

	RESERVOIR	STORAGE	(1000AF)			MATERSHED SNOWPACK ANALYSIS						
RESERVOIR		USEABLE I CAPACITYI	** USE THIS YEAR	EAELE STOR LAST YEAR	AGE ** AGE ** AVE.	WATERSHED	NO. COURSES AVE.D		R AS % OF			
GRASSY LAKE		15.1	12+9	13.0	10.4 1	SNAKE above JACKSON LAKE	8	98	93			
JACKSON LAKE		624.4	149.4	275.4	612.5	PACIFIC CREEK	2	135	114			
PALISADES		1200.0	912.9	929.3	907.8	GROS VENTRE RIVER	4	134	106			
						HOBACK RIVER	7	125	102			
						GREYS RIVER	4	142	100			
						SALT RIVER	5	105	93			
						SNAKE above FALISADES	30	115	97			

^{*}Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

UPPER YELLOWSTONE AND MADISON RIVER BASINS



WATER SUPPLY OUTLOOK:

This basin is one of only two in the state that showed above average precipitation during the month. For the month it was 4% above average and for the year it is 17% above average. Streamflow forecasts predict near normal flows for this next season Snowpack accumulation is also near normal. Reservoir capacity is 73% and is about 14% above average.

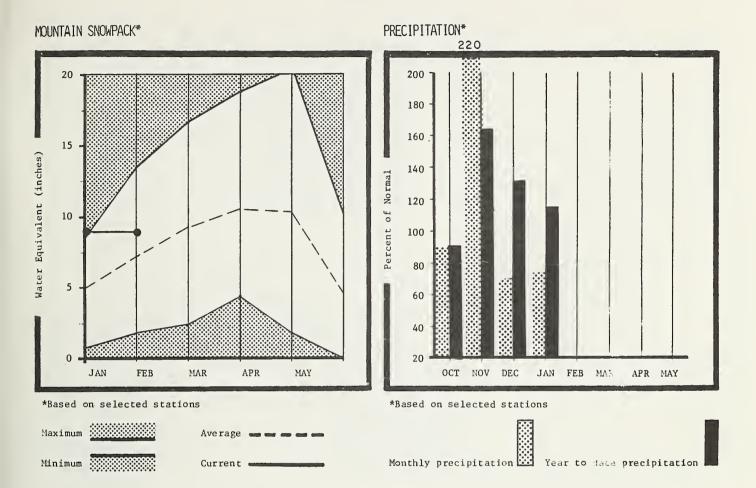
UPPER YELLOWSTONE and MADISON RIVER BASINS

FORECAST FOINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOH FLOH (CFS)	LOW DATE
	-									
YELLOWSTONE RIVER at Lake Outlet	AFR-SEF	826.0	725.0	87	105	71				
YELLOWSTONE RIVER at Corwin Spgs.	APR-SEP	2027.0	1640.0	80	78	64				
YELLOWSTONE RIVER near Livingston	AFR-SEF	2379.0	1852.0	7.7	95	61				
MADISON RIVER near Grayling, MT *	APR-SEP	496.0	498.0	100	117	83				

	RESERVOIR STORAGE	(1000AF) I	WATERSHED S	NOHPACK AN	NALYSIS
RESERVOIR	USEABLE I CAPACITY!	** USEABLE STORAGE ** I THIS LAST I YEAR YEAR AVE. I	HATERSHED	NO. COURSES AVE.D	THIS YEAR AS % OF
EMMIS LAKE	41.0	30,1 31,0 35,6	UPPER MADISON RIVER	10	102 93
HEBGEN LAKE	378.0	276.2 310.2 232.6 I	CLARKS FORK	13	123 89
			UPPER YELLOWSTONE RIVER	15	108 90

^{*}Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

WIND RIVER BASIN



WATER SUPPLY OUTLOOK:

Prospects for excellent streamflows continue to be forecast for this basin. The upper part of the basin is near normal, while the lower part of the basin is predicted to be 12% above normal. Snowpack accumulation follows a similar pattern. The Popo Agie drainage has a snowpack build up that is 38% above normal. Precipitation for the month was only 73% of average, but total precipatition for the year is 60% above average. Current reservoir capacity is nearly 91% which is 46% above average.

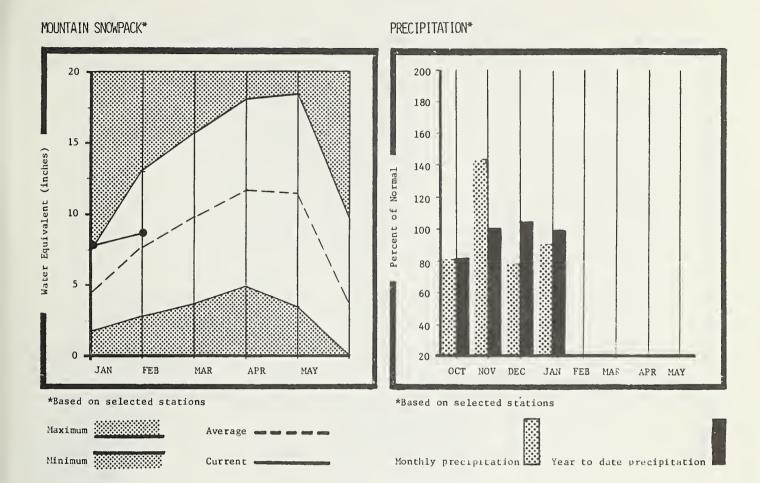
WIND RIVER BASIN

FORECAST FOINT	FORECAST	20 YR. AVE.	MOST F'ROBABLE	MOST FROBABLE	REAS.	REAS. MIN.	PEAK FLOW	PEAK	LOW FLOW	LOH
TOTECHES TOTAL	PERIOD	(1000AF)	(1000AF)	(% AVE.)		(% AVE.)	(CFS)	DATE	(CFS)	DATE
			Property (St.	:-\:::::::::						
WIND RIVER near Dubois	AFR-SEP	106.0			130					
VIND RIVER at Piverton ∗	APR-SEP	678.0	765.0	112	141	85				
PTHC RIVER below Boysen *	APR-SEP	1163.0	1325.0	113	142	48				
AULL LAME CREEK near Lenore *	AFR-SEF	188.0	215.0	114	134	93				
LITTLE POPO AGIE RIVER near Lander	AFR-SEF	53.0	60.0	113	143	83				

I	RESERVOIR STORAGE	(1000AF) 	WATERSHED SN	OWFACK ANAL	YSIS
RESERVOIR	USEABLE I CAPACITYI I	** USEABLE STORAGE ** THIS LAST YEAR YEAR AVE.	WATERSHED	NO. COURSES AVE.D	THIS YEAR AS % OF LAST YR, AVERAGE
DULL LAKE	151.1	42.1 89.7 93.3	UPPER WIND RIVER	11	139 93
E:0YSE#	549.9	597.4 351.8 348.0	WIND above RIVERTON	19	161 10.
PILOT BUTTE	31.6	25.0 23.7 14.7		4	186 138
			WIND above EOYSEN		166 112

^{*}Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

BIGHORN RIVER BASIN



WATER SUPPLY OUTLOOK:

Streamflow forecasts predict near normal streamflows for much of the basin. The exception is the Clarks Fork and Shoshone Rivers. Streamflows for these two are predicted to be about 12% below normal. Snowpack accumulation continues to be near normal with the Greybull River being about 16% above normal. Precipitation for the month and for the year are slightly below normal. Reservoir storage stands at nearly 70% of capacity which is about 40% above average.

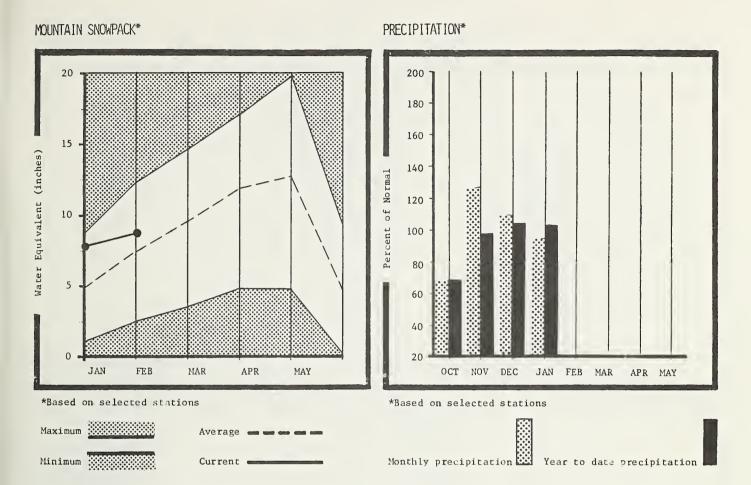
BIGHORN RIVER BASIN

FORECAST POINT	FORECAST	20 YR. AVE.	MOST PROBABLE	MOST PROBABLE	REAS.	REAS. MIN.	FEAK FLON	PEAK	LON FLOW	FOM
	PERIOD	(1000AF)	(1000AF)	(% AVE.)	(% AVE.)	(% AVE.)	(CFS)	DATE	(CFS)	DATE
NIND RIVER below Boysen *	APR-SEP	1163.0	1325.0	113	142	86				
HELL CREEK near Shell	APR-SEP	78.0	70.0	89	122	68				
REYBULL RIVER at Meeteetse	APR-SEP	215.0	200.0	93	119	67				
HOSHONE RIVER blw Boffalo Bill *	APR-SEP	845.0	745+0	88	110	66				
LARKS FORK near Belfry	AFR-SEF	628.0	534.0	85	117	53				
OUTH FORK SHOSHONE near Valley	APR-SEP	278.0	255.0	91	118	66				
OWOOD RIVER near Tensleep	MAR-SEP	71.0	67.5	95	121	69				

	RESERVOIR STORAGE	(1000AF)	! !	WATERSHED SM	IONEACK A	NALYSIS
RESERVOIR	USEABLE CAPACITY		AGE ** 1	WATERSHED	NO. COURSES AVE.D	THIS YEAR AS % OF
EOYSEN	549.9	597.4 351.8	348.0	SHOSHONE RIVER		119 98
BUFFALO BILL	373.1	271,4 255,8	188.6	NOWOOD RIVER	5	134 102
BIGHORN LAKE	1356.0	731.0 907.4	609.2	GREYBULL RIVER		137 116
				SHELL CREEK	7	133 104
		- 10		BIGHORN (Boysen-Bighorn)	34	132 103

^{*}Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

POWDER AND TONGUE RIVER BASINS



WATER SUPPLY OUTLOOK:

Snowpack accumulation continues to be near average throughout the basin. Streamflow forecasts also are near average. January precipitation was about 7% below average, but for the year, precipitation is near normal.

POWDER and TONGUE RIVER BASINS

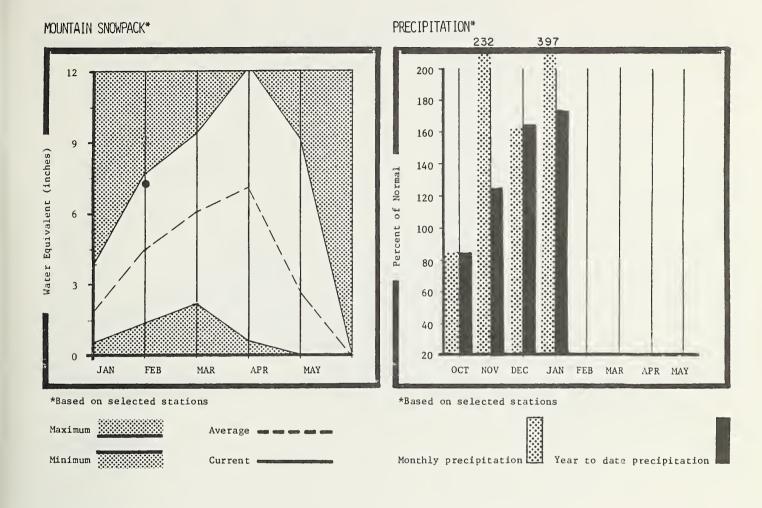
FORECAST POINT	FORECAST	20 YR. AVE.	MOST PROBABLE	MOST PROBABLE	REAS. MAX.	REAS. MIN.	PEAK FLOW	PEAK	LON FLON	LOW
	PERIOD	(1000AF)	(1000AF)	(% AVE.)	(% AVE.)	(% AVE.)	(CFS)	DATE	(CFS)	DATE
TONGUE RIVER near Dayton *	APR-SEP	123.0	125.0	101	132	72				
MIDDLE FORK POWDER near Barnum	APR-SEP	21.6	20,5	94	130	60				
NORTH FORK POWDER near Hazelton	APR-SEP	10.6	10.5	99	132	66				
CLEAR CREEK near Buffalo	APR-SEP	40.0	40.0	100	135	65				
ROCK CREEK near Buffalo	APR-SEP	25.4	25.0	98	134	63				
FINEY CREEK at Kearny	APR-SEP	54.8	55.0	100	137	64				
LITTLE BIGHORN at Hardin• MT	AFR-SEP	182.0	191.0	104	137	48				

	RESERVOIR STORAGE	(1	1000AF)			h	ATERSHED SN	DWPACK AN	ALYSIS	
RESERVOIR	USEABLE I CAPACITYI I		LE STORAL LAST YEAR	GE XX I	WATERS	HED		NO. COURSES AVE.D	THIS LAST	 AS % OF
TONGUE RIVER	68.0	12.4	14.6	30.2 (UFPER 1	TONGUE R	IVER	13	122	102
					GOOSE (CREEK		6	119	9:6:
				¥	CLEAR (CREEK		3	152	105
					CRAZY I	OMAM CR	EEK	3	149	103
				1	POWDER	RIVER		29	126	101

^{*}Corrected for upstream diversions or changes in reservoir storage.

Average is for 1961-80 period.

BELLE FOURCHE AND CHEYENNE RIVER BASINS



WATER SUPPLY SUTLOOK:

Snowpack accumulation continues to be much above average for the basin. It is currently 74% above average. The above average snowpack could lead to above normal streamflows this coming spring and summer. Precipitation is presently 35% above average for the year. Reservoir storage is at 60% of the capacity which is slightly below normal.

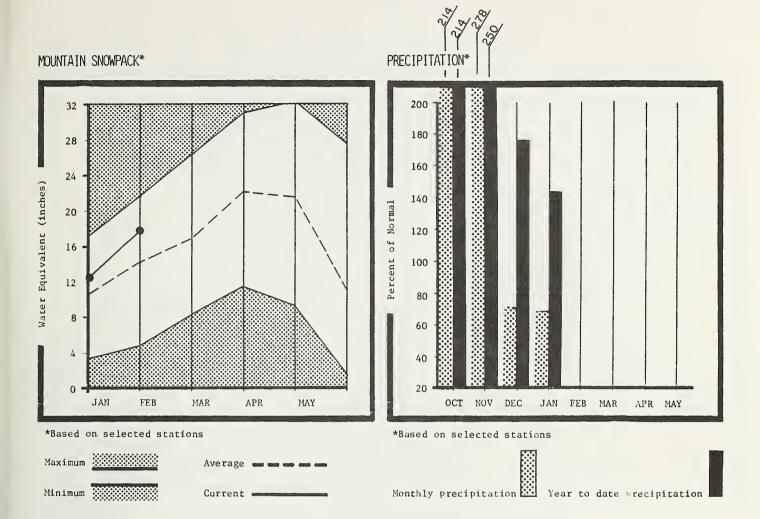
BELLE FOURCHE and CHEYENNE RIVER BASINS

FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOW FLOW (CFS)	LOH
-No forecasts issued i	r, this area-									
				·						

	RESERVOIR STORAGE	(1000AF)	1	WATERS	HED SNOWPACK AN	ALYSIS
RESERVOIR	USEABLE I CAFACITYI I	** USEAE:LE STOR THIS LAST YEAR YEAR	AGE **		NO. COURSES AVE.D	THIS YEAR AS % OF
ANGOSTURA	96.2	73.0 52.0	60.9		6	189 140
BELLE FOURCHE	185.2	60.3 125.6	112.9			
DEERFIELD	15.1	14.7 15.2	13.7			1112
KEYHOLE	190.4	55.9 71.4	117.0			-
PACTOLA	55.0	44.4 53.8	49.8			
SHADEHILL	81.5	121.0 51.4	48.3			

^{*}Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

UPPER NORTH PLATTE AND LITTLE SNAKE RIVER BASINS



WATER SUPPLY OUTLOOK:

Streamflow forecasts for the Upper North Platte Basin predict that above normal flows can be expected this spring and summer. The snowpack for this basin also remains above average with the Brush Creek drainage being 35% above normal. As for the Little Snake River Basin, both the snowpack buildup and streamflow forecasts are near normal. Precipitation for January in these basins was only 68% of normal, but is 63% above normal for the year.

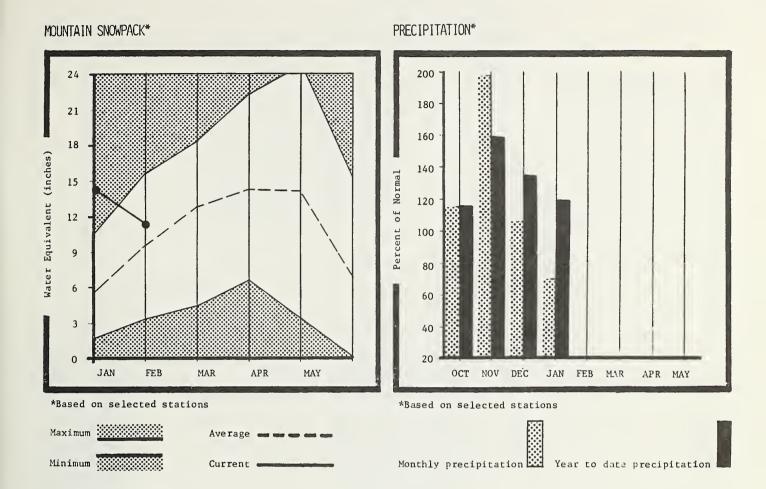
UFFER NORTH PLATTE and LITTLE SNAKE RIVER BASINS

FORECAST FOINT	FORECAST	ZO YR. AVE.	MOST PROBABLE	MOST PROBABLE	REAS.	REAS. MIN.	PEAK FLOW	PEAK	LOW FLOW	LOH
	PERIOD	(1000AF)	(1000AF)	(% AVE.)	(% AVE.)	(% AVE.)	(CFS)	DATE	(CFS)	DATE
NORTH PLATTE RIVER near Northgate	APR-SEP	262.0	300.0	114	140	89				
MORTH PLATTE PIVER near Sinclair	AFR-SEF	710.0	781.0	110	132	81				
NCAMPMENT RIVER near Encampment	AFR-SEP	156.0	175.0	112	138	88				
OCK CRESK mear Arlington	AFR-SEF	57.6	66.0	114	141	89				
ITTLE SNAKE RIVER near Dixon *	AFR-SEF	320.0	345.0	107	140	7.6				
ITTLE SMAKE near Slater. 80 *	APR-SEP	158.0	175.0	110	143	78				

RESE	RVOIR STORAGE		(1000AF)	1	WATERSHED SNO	OWPACK AN	ALYSIS		
PECEDIATA	USEABLE I		ABLE STOR	I- AGE **	HATERCHER	NO.	THIS	YEAR	AS % OF
RESERVOIR	CAPACITYI	THIS YEAR	LAST YEAR	AVE. I	WATERSHED	COURSES AVE.D	LAST	YR.	AVERAGE
EHINOC	1017.3	633 ₊5	851.8	451.6	UFFER NORTH FLATTE	14	122		118
					ENCAMPMENT RIVER	3	105		104
					BRUSH CREEK	3	145		135
					MEDICINE BOW & ROCK CREEK	3	124		122
					N. FLATTE above SEMINOE	21	129		121
					UPPER LITTLE SNAKE RIVER	1	9.6		85
					SAVERY CREEK		112		116

^{*}Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

LOWER NORTH PLATTE, SWEETWATER, AND LARAMIE RIVER BASINS



WATER SUPPLY OUTLOOK:

Streamflow predictions for the Laramie and Sweetwater Rivers are for above average flows. The Lower North Platte River is forecast to have near normal flows. Snowpack accumulation in the basin continues to be above normal by as much as 30% in some locations. Precipitation for the month was similar to the rest of Wyoming in that it was below average. Precipitation for the year is above normal by about 21%. Reservoirs in the basin are at 77% of capacity, which is nearly 58% above average.

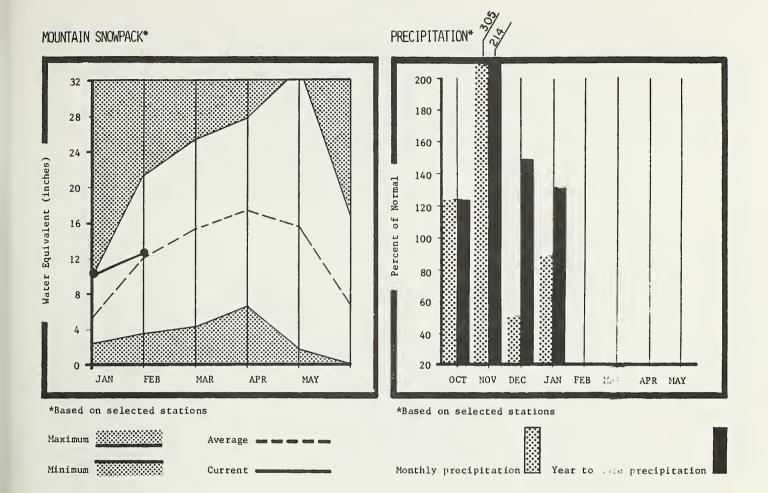
LOWER NORTH PLATTE, SWEETWATER, and LARAMIE RIVER BASINS

FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	MOST FROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOW FLOW (CFS)	LOH DATE
NORTH PLATTE RIVER near Sinclair	AF'R-SEF	710.0	781.0	110	132	81				
SWEETWATER RIVER near Alcova	AFR-SEF	73.7	84.0	113	180	61				
DEER CREEK at Glenrock	AFR-SEF	51.8	50,0	96	160	23				
LaPFELE CREEK above Reservoir	APR-SEP	33,7	32.5	9.6	160	33				
LARAMIE RIVER near Moods *	AF'R-SEF	132.0	160,0	121	152	91				
EITTLE LAFAMIE RIVER near Filmora	APR-SEP	65.1	72.5	111	141	81				

	RESERVOIR STORAGE	(1000AF)	1	MATERSHED SH	IOME. ACK AN	ALYSIS		
RESERVOIR	USEABLE I CAPACITYI I	** USEA&LE STO THIS LAST YEAR YEAR	RAGE **	WATERSHED	NO. COURSES AVE.D		-	AS % OF AVERAGE
ALCOVA	184.3	≝← 157.1	157.5	SWEETWATER		198		125
GLENDO	783.7	151.1 340.3	333.1	DEER & LaPRELE CREEKS	2	118		105
GUERNSEY	45.2	10.1 1.3	7.2	N. PLATTE above LARAMIE	15	126		118
PATHFINDER	1015.5	718.1 894.3	540.8	LITTLE LARAMIE RIVER	4	139		107
SEMINOE	1017.3	633.5 B51.8	451.6	UPPER LARAMIE RIVER	7	136		130
WHEATLAND #2	98.9	60-5 71-4	47.1	LARAMIE RIVER above MOUTH	14	140		118
					53	132		119

^{*}Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

UPPER GREEN RIVER BASIN



WATER SUPPLY OUTLOOK:

Near normal streamflow is forecast for the basin. Snowpack buildup has sagged and is now also near normal. Precipitation for January was about 12% below average, while totals for the year remain above average by 29%.

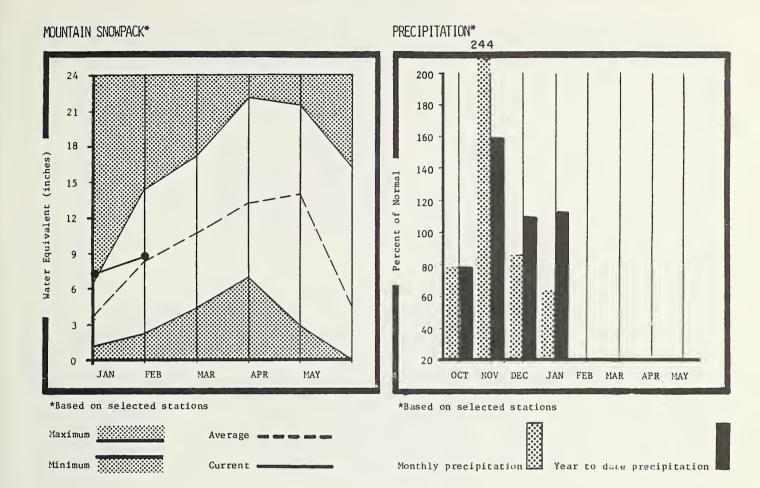
UPPER GREEN RIVER BASIN

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~										
FORECAST POINT	FORECAST	20 YR. AVE.	MOST PROBABLE	MOST PROBABLE	REAS.	REAS. MIN.	PEAK FLOW	PEAK	LOH FLOH	LON
	PERIOD	(1000AF)	(1000AF)	(% AVE.)	(% AVE.)	(% AVE.)	(CFS)	DATE	(CFS)	DATE
GREEN RIVER near Warren Bridge	APR-SEP	326.0	345.0	105	125	87				
FONTENELLE RESERVOIR Inflow	APR-JUL	869.0	1000.0	115	140	87				
LaBARGE CREEK at LaBarge Meadows	APR-SEP	8.9	9.0	101	135	90				
BIG SANDY RIVER near Big Sandy	APR-SEP	61.0	62.0	108	133	80	1000			

	RESERVOIR STORAGE	(1000AF)	! !	WATERSHED SNI	NOWPACK ANALYSIS					
RESERVOIR	USEABLE ( CAPACITY		GE ** I	HATERSHED	NO. COURSES AVE.D	THIS YEAR AS % OF				
BIG SANDY		NO REPORT		GREEN above WARREN BRIDGE	4	159 102				
EDEN		NO REPORT		UPPER GREEN (West Side)	7	135 101				
FLAMING GORGE	3749.0	3014.0 3309.8		NEWFORK LAKE	3	147 102				
FONTENELLE	344.8	35.6 172.4	273.7	BIG SANDY/EDEN VALLEY  GREEN above FONTENELLE	2 12	162 124 146 105				
				GUEEN SOUVE FUNIENELLE	14	170				

^{*}Corrected for upstresm diversions or changes in reservoir storage. Average is for 1961-80 period.

# LOWER GREEN RIVER BASIN



# WATER SUPPLY OUTLOOK:

Streamflow forecasts in this basin show flows are expected to be near normal for the spring and summer months with the exception of the Blacks Fork and Henrys Fork drainages. These drainages are expected to be above normal by as much as 25%. Snowpack accumulation is near normal. January precipitation was about 40% below normal, however, totals for the year show that precipitation is nearly 17% above normal.

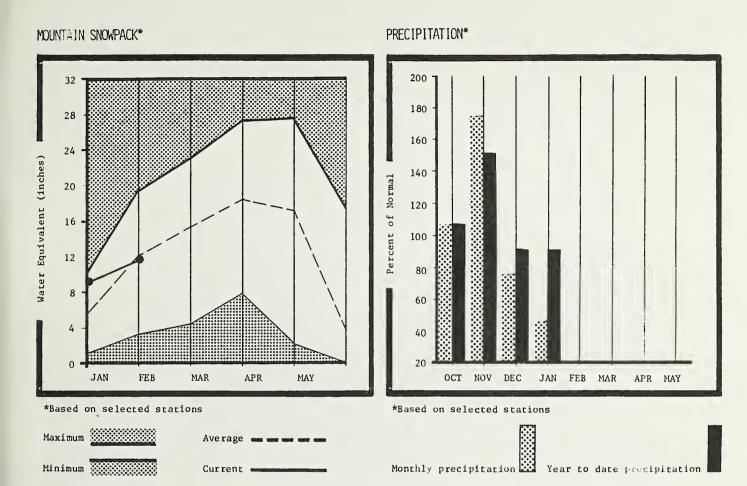
#### LOWER GREEN RIVER BASIN

FORECAST POINT	FORECAST PERIOD	20 YR, AVE, (1000AF)	MOST PROBABLE (1000AF)	MOST FROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLOW -(CFS)	PEAK DATE	LOH FLOH (CFS)	LOW
FONTENELLE RESERVOIR Inflow	APR-JUL	869.0		115			:			
FURTERELLE RESERVOIR INTOW	HI K-OOL	06740								
HAMS FORK near Frontier	APR-SEP	71.3	74.0	1#3	133	74				
							:			
GREEN RIVER near Green River, WY *	APR-SEP	1079.0		102						
BLACKS FORK near Milborne, UT	APR-JUL	89.9		111						
HENRYS FORK mean Minila, UT	APR-SEP	48.0	60.0	1.25	169	92				
							::			
FLAMING GORGE Inflow *	APR-JUL	1248.0		110						

	RESERVOIR STORAGE	(1000AF) I	MATERSHED SN	IOHPACK AN	NALYSIS
RESERVOIR	USEABLE I CAPACITYI I	** USEABLE STORAGE ** I THIS LAST YEAR YEAR AVE. I	WATERSHED	NO. COURSES AVE.O	THIS YEAR AS % OF
FONTENELLE	344.8	35.6 172.4 273.7	HAMS FORK RIVER	3	142 101
FLAMING GORGE		3014-0 3309-8	BLACKS FORK	4	107 107
VIVA MAUGHTON RES	42.4	29.6 33.0   	HENRYS FORK  GREEN above FLAMING GORGE	1 15	90 86 145 104

^{*}Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

# UPPER BEAR RIVER BASIN



# WATER SUPPLY OUTLOOK:

Water users can expect near normal streamflows this year. Snowpack buildup has slowed, but is still near normal. Precipitation for January was much below normal, being only 47% of normal. Precipitation for the year is slightly below normal.

# UPPER BEAR RIVER BASIN

PERIOD (1000AF) (1000AF) (% AVE.) (% AVE.) (% AVE.) (CFS) DATE (CFS)  SMITHS FORK near Border APR-SEP 119.0 120.0 101 126 71  THOMAS FORK near State line APR-SEP 35.1 35.0 99 125 74  SEAR RIVER at Utah-Wyoming line APR-JUL 110.0 118.0 107 135 84  SEAR RIVER near Woodruff, UT APR-JUL 139.0 135.0 97 145 60	FORECAST FOINT	FORECAST	20 YR. AVE.	MOST PROBABLE	MOST PROBABLE	REAS.	REAS. MIN.	PEAK FLO <del>N</del>	PEAK	LOH FLOW	LOH
### SMITHS FORK near Border APR-SEP 119.0 120.0 101 126 71  ###################################		PERIOD	(1000AF)	(1000AF)	(% AVE.)	(% AVE.)		(CFS)	DATE		DATE
### SMITHS FORK near Border APR-SEP 119.0 120.0 101 126 71  ###################################											
HOMAS FORK near State line APR-SEP 35.1 35.0 99 125 74  BEAR RIVER at Utah-Wyoming line APR-JUL 110.0 118.0 107 135 84  BEAR RIVER near Woodruff, UT APR-JUL 139.0 135.0 97 145 60	SMITHS FORK near Border	APR-SEP	119.0	120.0	101	126	71				
EAR RIVER at Utah-Wyoming line APR-JUL 110.0 <b>118.0 107 135 84</b> EAR RIVER near Woodruff, UT APR-JUL 139.0 135.0 97 145 60	HIOMAC FORM CA-A- 3:	ADD CED	25 4								
EAR RIVER at Utah-Wyoming line APR-JUL 110.0 118.0 107 195 84  EAR RIVER near Woodruff, UT APR-JUL 139.0 135.0 97 145 60	HUMAS FURN Near State line	AFK-SEF	35+1		· · · · · · · · · · · · · · · · · · ·						
EAR RIVER near Woodruff, UT APR-JUL 139.0 135.0 97 145 60	EAR RIVER at Utah-Myoming line	APR-JUL	110.0	118.0	107	135	84				
	EAR RIVER near Woodruff, UT	APR-JUL	139.0								
REAR FIVER near Randolph, UT APR-JUL 110.0 110.0 100 189 76	EAR RIVER near Randolph, UT	APR-JUL	110.0								

	RESERVOIR STORAGE	(1000AF) I	MATERSHED SN	OMPACK AN	ALYSIS
RESERVOIR	USEABLE I CAPACITYI	** USEABLE STORAGE ** 1 THIS LAST 1 YEAR YEAR AVE. 1	WATERSHED	NO. COURSES AVE.D	THIS YEAR AS % OF
₩OODRUFF NARROWS	55.8	36.0 55.5	UPPER BEAR RIVER SMITHS & THOMAS FORK'S BEAR RIVER abv IDAHO line	3 3 10	77 74

^{*}Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

# THE FOLLOWING ORGANIZATIONS COUPERATE WITH THE SOIL CONSERVATION SERVICE IN SNOW SURVEY WORK

#### State

Conservation Districts of Wyoming
State Engineer of Wyoming
Department of Water Resrouces of Nebraska
Irrigation Districts of Wyoming
University of Wyoming
Department of Atmospheric Resources
Department of Agricultural Engineering

#### Federal

- U.S. Department of Agriculture
  Soil Conservation Service
  Forest Service
- U.S. Department of Commerce
  NOAA, National Weather Service
- U.S. Department of Interior
  Bureau of Reclamation
  Geological Survey
  National Park Service
  Bureau of Indian Affairs
  Bureau of Land Management

#### Private

Utah Power and Light Company Eden Valley Irrigation District

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

United States Department of Agriculture Soil Conservation Service 100 East 'B' Street - Room 3124 Casper, WY 82601

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

THIRD-CLASS BULK RATE POSTAGE AND FEES PAID USDA - SCS CASPER WY PERMIT NO. G-267

Wyoming Water Supply Outlook

and

Federal - State - Private Cooperative Snow Surveys



SOIL CONSERVATION SERVICE